

APPROVED	C.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

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CTGCAGTCTATTGGATGAAGAGTGTACATATTCAATAATTCTAAAGTAGGCAGAAATTAAAG
 GGGATGGAATATATACTTGTACTGCCCTAGATAGTCACCAGGATGTTACAGTCTCGTT
 ACTGCTCTGAAGCCTACTGATAGAATTAATAAAACTGAGAGAGAGAGAGAGAGAGAGAGAG
 AGAGAGAGGGGAG
 GAAGAAAACAAGGTSAAAGCCATCTGCTTAACCTATGTCCACATTCTCTCAAGAGCATTGCTCTA
 TTTGTAGAATTATCTATATTGTTAAGAACATCTCCATTGTTAAGATTGTTGGCTGGAGATC
 CAGCTCTGTTGATAAAAGTGCCTGCCTAACATGCATGAAGTCCTAGGTTCTATTCCAAGGCTAC
 ATAAAACCTTGTGTTGATGAATGCCGTAACTCCCAGTACGCAGCAAGGAGAGACAAGGAGGA
 TCAGAAGCTTAAGGACATCATTGATAGTGAGTTGAGGAAAGCTGAGGTTACATGGAAC
 TCTCTCTCTCAAAAACAAAACAAAACAAAACCTCTACTAATATTCTGGATTCTGTT
 TGATTTTAGGATCTCAAGAGCATGCTGACGTCAATTATGTGTTCCATCAGATACAGACAGAG
 ATCATAAACATTAACTCATTGATTATATGTTGAGAGTGTCCCTCAAGAACCAATGGCAAAC
 ATCCACTGAGGATACACGGAAGCTTAGAAAATCTCTAATTAAAATCCTGACATAATGGAAGTGC
 TCACAAACCAGCCAACACCTAATAAAACCAGTGGCAAGAGCAACAACTCGGCATTTCTACTT
 TGAATCCTGCCAACCCCCCTTTCTAGCCATACTCTGCTACTCATAGCATATACTGTGATCCTA
 ATCATGGCATTGGAAACCTCTCTTATCATCATCATCTTAAGAAACAGAGAGAGCTC
 AAAATGTTACCAACATACTGATTGCCAACCTGCTCCCTCTGACATCTGGTGTGTCATGTG
 CATCCCTTACGGTCATCACACTGTGACCGACTGGTATTGGAACACTATGTGAAA
 CTCACTCCTACGTGCAAAGTGTCTCAGTTCTGTGTCATATTCTCCCTGTGTTGATTGCTA
 TTGAACGATATCAGCTGATTGTAACCCCCCTGGCTGGAAACCCAGAGTAGCTCATGCCTATTG
 GGGGATCATCTGATTGGCTCATTTCTCTGACATTGTCTATTCCCTTATTCTGCTCTACCAC
 CTCACCAATGAGCCCTTCATAATCTCTCTCCCTACTGACATCTACACCCACCAGGTAGCTT
 GTGTGGAGATTGGCCTCTAAACTGAACCAACTCCTCTTCTACATCATTATTATGCTCCA
 GTATTGTCCTCTGGTTTCATTCTATCTGCTACCTGAAGATGTTCTGCTCCGAAAGGGTAA
 ATGTGATGTTGATTCCATCGTAGTGACTTTGGAGCCTGCTGGTTGCCCTGAACATTCAA
 TGTGATCTCGACTGGTATCATGAGATGCTGATGAGCTGCCACCACGACCTGGTATTGTTAGTT
 TGCCACTTGATTGCTATGGTTCTACTTGCTAAATCCTCTCTTATGGATTCTCAACAAAA
 ACTTCCAGAAGGATCTAATGATGCTTATTCAACCCTGTTGGTGTGGTGAACCTCAGGAAAGTTA
 TGAAAATATTGCCATGTCTACTATGCACACAGATGAATCCAAGGGATCATTAAACTGGCTCAC
 ATACCAACAGGCATATAGAAACTGGTAAGCAAAATCAAAGCCCTCTGTTATGAAAGAAAGAGA
 AGAAATAGTATGGAATAGGGCAAGGTGCAGAGGAAGCCAGACTTAAACACATAATATCTTGGG
 CCCAGTTGCTTAAGTAAAGCATGTCTACTCCATTGCCATAGAACACACAGAGATTATC
 CCTACCCCTTCTTTCTTGGAAAGATAATAACTTAAACACCTAGACATCATTACTGAG
 GAAGAGAACAAAATGAGAGAGCATACAAGGACAGCAGAGATGCTGGGGTACAAATTACGT
 TATTGCTGGAATAGCTAGAAAGTTATTAGTTGCTGCTGCAG (SEQ ID NO:1)

FIGURE 1

APPROVED BY	O.G. FIG. CLASS	SUBCLASS
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underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

[CTGCAGTCTATTGGATGAAGAGTGTACATATTCAATAATTCTAAAGTAGGCAGAAAT
 TAAAGGGATGGAATATATACTTGTACTGCCCTAGATAGTCACCAGGATGTTGTTACAG
 TCTCGTTACTGCTCTGAAGCCTATACTGATAGAATTAAATAAAACTGAGAGAGAGA
 GAGAGGGACAGAGAGAGAGAGGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA
 GAGAGAGAGAGAGAGAGAGAAAACAGGTAAGCCATCTGCTTAACCTATGTCCACAT
 TCTCTCAAGAGCATGTCCTATTGAGAATTATCTATATTGTTAAGAACATCTCATT
 GTTAAGAGTTTGTGGGCTGGAGATCCAGCTCTGTTGATAAAAGTGCTGCTAACATGCAT
 GAAGTCCTAGGTTCTATTCCCAGGCTACATAAAACCTTGTGTTGATGAATGCCGTGA
 ATCCCCAGTACGCAGCAAGGAGAGACAAGGAGGATCAGAACGCTTAAGGACATCTTGTG
 CATACTGAGTTGAGGAAAGCTGAGGTTACATGGAACATCTCTCTCTCAAAAACAAAAC
 AAAACAAAACAAAACCTCTACTAATATTCTGGATTCTGTTGATTTAGGATCTAAC
 AGCATGCTGACGTCAATTATGTTCCATCAGATACAGACAGAGATCATAAACATTAA
 CTCATTGATTATATGTTGAGAGTTGCTCAAGAACCAATGCCAACATCCACTGAGG
 ATACACGGAAGCTTAGAAAATCTCTAATTAAATCCTGACATAATGGAAGTGTGTCACAA
 CCAGCC] AACACCTAATAAAACAGTGGCAAGAGAACAAACTCGGCATTTCCTACTTTG
 AATCCTGCCAACCCCTTTCTAGCCACTCTTGCTACTCATAGCATATACTGTGATCC
 TAATCATGGCATTGGAAACCTCTCTTATCATCATCATCTTAAAGAAACAGAGAG
 AAGCTAAAATGTTACCAACATACTGATT [GCCAACCTGTCCTCTGACATTTGGTG
 TGTGTCATGTGCATCCCTTTACGGTCATCTACACTCTGATGGACCACTGGTATTGGG
 AACACTATGTGAAACTCACTCCTACGTGCAAAGTGTCTCAGTTCTGTCATATT
 TCCCTTGTTGATTGCTATTGAAACGATATCAGCTGATTGTGAACCCCCGGCTGGAAA
 CCCAGAGTAGCTATGCCATTGGGGATCATTTGATTGGCTCATTTCTGACATTG
 TCTATTCCCTTATTCTGTCCTACCACTCACCAATGAGCCCTTCATAATCTCTCTC
 CCTACTGACATCACACCCACAGGTAGCTGTTGAGATTGGCCTCTAAACTGAAC
 CAACTCCCTTTCTACATCATTATTTGCTCCAGTATTGTCCTCTGGGTTTCATT
 CTTATCTGCTACCTGAAGATCGTCTGCTCCGAAAAAGAACACTAGGCAGGTGGACAGG
 AGAAAAGAAAATAGAGCCGCTCAATGAGAACAAAGAGGTAATGTGATTTGATTTCC
 ATCGTAGTGACTTTGGAGCCTGCTGGTTGCCCTTGAACATTTCATGTCATCTCGAC
 TGTTATCATGAGATGCTGATGAGCTGCCACACGACCTGGTATTGTTGCCACTTG
 ATTGCTATGGTTCTACTTGCTAAATCCTCTTTATGGATTCTCAACAAAACCTTC
 CAGAAG] GATCTAATGATGCTATTCAACACTGTTGGTGTGGAACCTCAGGAAAGTTA
 TGAAAATATTGCCATGTCTACTATGCAACACAGATGAATCCAAGGGATCATTAAACTGGC
 TCACATACCAACAGGCATATAGAAAATGTTGAAAGCAAAATCAAAGCCCTCTGTTATGAAA
 GAAAGAGAAGAAAATGATGGAATAGGGCAAGGTGAGAGGAAGCCAGACTAAACACAT
 AATATCTTGGGCCAGTTGCTTTAAGTTAACGATGTCTACTCCATTGCCATAGAA
 CACACAGAGATTATCCCTACCCCTTTCTTTCTGGAAAGAATAAACTTAAACA
 ACCTAGACATCATTACTGAGGAAGAGAACAAAATGAGAGAGCATAAAGGACAGCAGAG
 ATGTCTGGGTACAAAATTACGTTATCGCTGGAATAGCTAGAAAGTTATTGTTGTC
 TGCAG (SEQ ID NO:1)

FIGURE 2A

APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
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Gene Sequence Structure

*

846 bp

Sequence Deleted

1047 bp

Size of CDS: 2281 bp



Targeting Vector* (genomic sequence)

Construct Number: 2762

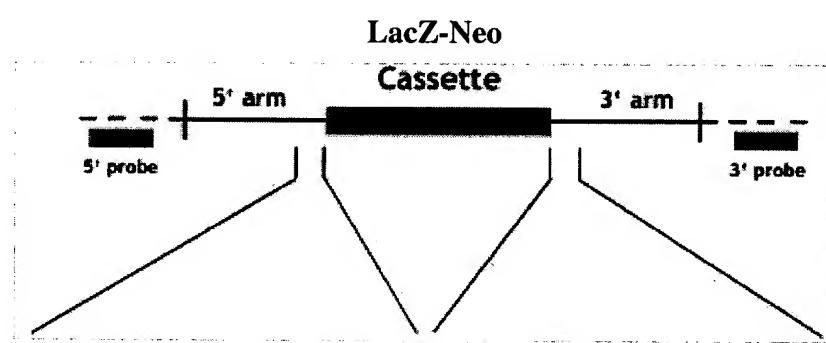
Arm Length:

5': 5 kb

3': 0.5 kb

— Targeting Vector
- - - - Endogenous Locus

* Not drawn to scale



5' > TTTAGGATCTCAAGAGCATGC
TGACGTCATTATGTGTTCCATC
AGATACTGACAGAGATCATAAACAA
TTAACTCATTGATTATATGTTGA
GAGTTGTCCCTCAAGAACCAATGG
CCAAACATCCACTGAGGATACACG
GAAGCTTAGAAAATCTTAATTAA
AATCCTGACATAATGGAAGTGCTC
ACAAACCAGCC**<3'**
(SEQ ID NO:2)

5' > GCCAACCTGTCCCTCTCTGAC
ATCTTGGTGTGTGTCATGTGCATC
CCTTTACGGTCATCTACACTCTG
ATGGACCACTGGGTATTGGGAAC
ACTATGTGAAACTCACTTCCTAC
GTGCAAAGTGTCTCAGTTCTGTG
TCCATATTCTCCCTTGTGTTGATT
GCTATTGAACGATATCAGCTGATT
GTGAACCCCCG**<3'**
(SEQ ID NO:3)

FIGURE 2B